



STATE OF MICHIGAN

DEPARTMENT OF COMMUNITY HEALTH
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

JANET OLSZEWSKI
DIRECTOR

MEMORANDUM

DATE: February 13, 2004

TO: Long Term Care Facilities

FROM: MDCIS/Clinical Advisory Panel
Quality Improvement Nurse Consultants

RE: Clinical Process Guideline: Behavior Management and Antipsychotic Medication Prescribing

Best clinical practice is only worthwhile to the extent that we use it to guide care for our residents.

Collaboratively, we are striving to improve behavior management and the prescribing of antipsychotic medications for nursing home residents in Michigan. The purpose of the of the Guide is to clarify how to apply the **Behavior Management and Antipsychotic Medication Prescribing Process Indicator Checklist**. Electronic copies are available for reprint at www.michigan.gov/qinc.

This optional "best practice" tool was presented to you at the Fall 2003 Joint Provider/Surveyor Training on September 9, 2003. Effective date for usage of the tool was October 6, 2003. The appendix was revised November 2003. Both facilities and surveyors will have the opportunity to use the Checklist when behavior management and antipsychotic medication use are of concern. Facilities will be accorded the opportunity to demonstrate that they have followed the steps in this guideline, as evidence to support an appropriate care process related to behavior management and antipsychotic medication prescribing.

A workgroup including doctors, nurses, a psychologist, social workers, and activity therapists with experience in geriatrics and nursing home care discussed the topic in depth. They used generally accepted, current references and the process guideline materials developed by the state of Arkansas in preparing these documents. The Process Indicator Checklist contains a series of steps related to managing behavior and prescribing antipsychotic medications.

Best clinical practice information helps each facility provide the best possible care throughout the year. Along with information in the Federal OBRA regulations, our surveyors will use these Process Guidelines to review how your facility is managing behavior and prescribing antipsychotic medications. We encourage you to examine your process to manage behavior and prescribe antipsychotic medications and to consider the application of the following information.

The Basic Care Process

The management of all conditions and problems in a nursing home should follow these basic steps:

Assessment/recognition: The purpose of this step is to provide a rational basis for deciding whether there is a need, risk, or problem and what to do about it. The facility's staff and practitioners collect relevant information about the resident (history, signs and symptoms, known medical conditions, personal habits and patterns, etc.) and then a.) evaluate and organize that information to identify whether the individual has a specific need, condition, or problem; and b.) describe and define the nature (onset, duration, frequency, etc.) of the risk, condition, or problem.

Diagnosis/cause identification: The facility's staff and practitioners attempt to identify causes of a condition or problem, or explain why causes cannot or should not be identified.

Treatment/management: The facility's staff and practitioners use the above information to decide how to manage a resident's condition, symptom, or situation. Where causes may be identifiable and correctable, they seek and address them or explain why they could not or should not have done so.

Monitoring: The facility's staff and practitioners evaluate the individual's progress over time in relation to a risk, need, problem, condition, or symptom, consider the effectiveness of interventions, and make a systematic determination about what to do next.

BEHAVIOR MANAGEMENT AND ANTIPSYCHOTIC MEDICATION PRESCRIBING

PROCESS INDICATORS	Yes	No
ASSESSMENT / PROBLEM RECOGNITION May relate to F272		
1. Were behaviors characterized in enough detail (onset, trigger, nature, intensity, duration, frequency, consequences and other relevant information)?		
2. Was there documentation that justified why the behavior was considered problematic?		
3. Was there timely recognition of problematic behavior?		
4. Were specific behaviors identified for which a medication or other intervention was provided?		
DIAGNOSIS / CAUSE IDENTIFICATION May relate to F319, F329, F330		
5. Was the current medication regimen reviewed as a potential source of problematic behavior?		
6. If a plausible cause was not found readily in someone with an acute behavior change, were fluid and electrolyte imbalance, acute infection, pain, or other potential causes considered?		
7. Was there an attempt to identify categories of cause(s) of any problematic behavior, OR explain why causes could not or should not be sought?		
8. Was a plausible explanation offered as to how it was determined that certain causes were the most likely reason for the behavior?		
TREATMENT / PROBLEM MANAGEMENT May relate to F 250, F279, F282, F329		
9. Were specific goals and objectives identified for managing behaviors?		
10. Were appropriate individuals consulted in planning the management of problematic behavior?		
11. Was cause-specific management demonstrated OR an explanation why it was not feasible or not provided?		
12. Was a rationale documented for the specific choice of interventions?		
13. Was there some documented explanation, in conjunction with a physician, for the dose, frequency, and duration of medication treatments?		
MONITORING May relate to F329, F330, F386, F429		
14. Were the individual's behavior and related causes monitored and treatment adjusted accordingly?		
15. Were the risks for significant complications and problems related to interventions identified and addressed?		
16. Were possible significant adverse drug reactions (ADRs) or other complications of psychoactive medications considered?		

Signature of person completing the form

Date

BEHAVIOR MANAGEMENT AND ANTIPSYCHOTIC MEDICATION PRESCRIBING

August 18, 2003

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
ASSESSMENT/PROBLEM RECOGNITION		
1. Were behaviors characterized in enough detail (onset, trigger, nature, intensity, duration, frequency, consequences, and other relevant information)?	<p>-Staff should describe target behaviors, using specific written criteria. Examples of possibly problematic behaviors or symptoms could include wandering, disruptive behaviors, hallucinations, increased withdrawal or isolation, etc.</p> <p>-Once a target behavior has been identified, staff should describe the behavior's characteristics (when it began, whom it affected, the intensity or severity of the behavior, how often it occurred, how long it continued and what happened over time, its consequences (including impact on self and others); - the circumstances, events, physical, environmental, or interpersonal factors that may have brought on or contributed to the behavior; - and other relevant information). The behavior(s) should be described in some detail, instead of by a single word like "agitated" or "combative". The content of hallucinations and delusions should be specifically described, as well as how it is impairing the resident's functioning.</p> <p>-Staff should use a consistent behavior-monitoring tool to quantitatively and qualitatively document targeted behaviors.</p>	<p>-Like any symptoms, behavioral symptoms can reflect anything from normal variations to an indication of severe underlying illness. Details are needed to determine whether a behavior is a problem and to identify its possible causes.</p> <p>-Consistent vocabulary and documentation over time is important in order to effectively compare behaviors and the potential value of specific interventions.</p>
2. Was there documentation that justified why the behavior was considered problematic?	<p>-Staff should clarify why a behavior was problematic, instead of a variation of a normal or natural response to a situation.</p>	<p>-Behaviors are a natural biological survival tactic of all living things.</p> <p>-Many behaviors in residents are purposeful and little different than those of individuals who reside outside of long term care facilities; for example, agitation in the face of an unmet need.</p> <p>-Individual direct care staff should not arbitrarily decide what constitutes a problem and when a treatment should be instituted.</p>

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
<p>3. Was there timely recognition of problematic behavior?</p>	<p>-For a new resident, staff should identify factors that influence behavior, taking into consideration caregiver input regarding previous behaviors and supportive interventions, situational and environmental factors, PAS/ARR information, MDS lifelong and customary routine information, and resident input, adaptive behavior, and strengths.</p> <p>-Within 24 hours of admission of a resident who has been identified as having a behavior problem or who enters the facility receiving treatment for a behavior problem or a psychiatric disorder, staff should initiate an in-depth evaluation of behavior.</p> <p>-Upon identification of a significant change in usual behavior patterns, staff should a) describe the details of the behavior and b) identify urgent behaviors requiring prompt intervention.</p> <p>-The staff and practitioner should be able to recognize symptoms that could represent conditions such as delirium, dementia, and psychosis.</p> <p>- Staff should document a discussion of significant symptoms with the physician after identifying their presence. The situation might require a consultation with Community Mental Health staff. PAS/ARR and MDS documentation may be required.</p> <p>-Staff should also evaluate more gradual changes in behavior, including those behaviors that become more frequent or more intense. A significant increase in problematic behaviors that cannot be resolved readily may represent a decline in condition that would require MDS revision.</p>	<p>-A comprehensive, individualized, resident-focused assessment provides necessary information to correctly identify resident needs and problems, causes of behaviors, and appropriate interventions.</p> <p>-High-risk behaviors require prompt interventions, whereas other behaviors can be evaluated over a longer time before determining specific interventions.</p> <p>-Delirium is an urgent situation that presents as changes in function, behavior, attention, or level of consciousness. It requires prompt medical and nursing evaluation and intervention. It may not require transfer from the facility.</p> <p>-Residents with mental illness or mental retardation must be appropriately placed and be offered appropriate mental health treatment.</p>
<p>4. Were specific behaviors identified for which a medication or other</p>	<p>-When a resident is receiving any psychoactive medications or any other interventions related to</p>	<p>-Residents may be taking a medication for which there is no clear indication.</p>

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
intervention was provided?	problematic behaviors or disturbed mood, staff should identify the specific behaviors that the interventions are intended to influence or prevent or determine the symptoms that led to the diagnosis.	<p>-It cannot be assumed without verification that because someone is receiving a medication, there must be a reason for it.</p> <p>-Some people are stable or improve despite, not because of, medications and treatments. In other words, there is not always a direct correlation between intervention and outcome.</p> <p>-Some illnesses, conditions or situations that result in problematic behavior, altered mood, or impaired cognition resolve, making prolonged interventions unnecessary.</p>
DIAGNOSIS/CAUSE IDENTIFICATION		
5. Was the current medication regimen reviewed as a potential source of problematic behavior?	<p>-Staff, including the physician, should review the current medication regimen for medications that may affect mental status or behavior.</p> <p>-If the consultant pharmacist or other staffs identify high-risk or problematic medications, staff should notify and discuss the situation with the physician.</p> <p>-The physician, or staff who have communicated with the physician, should document that a review has occurred.</p>	<p>-Many categories of medications may cause changes in cognition, level of consciousness, and behavior.</p> <p>-Often these changes may be caused by the collective effect of several medications in different categories with central nervous system (CNS) effects.</p>
6. If a plausible cause was not found readily in someone with an acute behavior change, were fluid and electrolyte imbalance, acute infection, pain, or other potential causes considered?	<p>-Each case should be reviewed for possible evidence of an underlying medical problem.</p> <p>-If delirium is suspected, prompt action is required by the staff, with physician notification, and by the physician, with possible medical intervention.</p> <p>-If delirium is not present, staff and the physician should consider psychiatric illnesses that might be causing problematic behavior; for example, new or recurrent depression or worsening of schizophrenia.</p> <p>-If delirium or major psychiatric illnesses are not present, staff should review and identify environmental factors, functional (task</p>	<p>-Delirium is an acute change in mental status and level of consciousness due to medical causes, and requires prompt assessment and intervention because it may be associated with significant complications, including an increased risk of death.</p> <p>-Delirium is common in the elderly, and has several common identified causes.</p> <p>-Adverse drug reactions (ADRs), infection, fluid and electrolyte imbalance, and pain are commonly identified causes of acute changes in behavior.</p> <p>-Other medical conditions with or without delirium can also affect behavior.</p> <p>-Situational-psychosocial factors (such as noise, type and amount of activities, conflicts with other</p>

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
	performance) impairments, and other factors related to interactions with others that could be related to problematic behaviors.	residents/staff, caregiver responses, communication problems) and functional impairments (such as tasks that are too complicated, complex or unfamiliar, not modified for increasing impairment, or that the resident is able, but not allowed, to complete) are other causes of problematic behaviors. -Staff beliefs and behaviors also influence the behavior of the resident. Challenging behavior may be a staff problem, instead of a resident problem.
7. Was there an attempt to identify categories of cause(s) of any problematic behavior, OR explain why causes could or should not be sought?	-Once an abnormal or target behavior has been identified, staff should attempt, with the physician, to recognize causes of the behavior or explain why identification of causes of behavior is not feasible or not indicated (for example, cannot cooperate with testing, knowing cause would not change management, resident is terminal, etc.). -The various categories of causes, such as medications, physical health, psychiatric illness, and situational-psychosocial factors should be evaluated as indicated.	-Problematic behavior has causes and root-cause analysis is a crucial step in cause identification. -Conditions need to be clearly and correctly identified for effective management. (For example, agitation could be due to delirium, pain, psychosis, depression, anxiety, frustration, environmental stress, or simply a typical response in a person who is not cognitively impaired but has reacted that way in annoyance throughout his lifetime).
8. Was a plausible explanation offered as to how it was determined that certain causes were the most likely reason for the behavior?	-If problematic behavior worsens during the subsequent 48 hours or is not resolving within a week, staff or the physician should document a basis for conclusions about the cause(s) of a resident's behavior; for example, why current treatment is still warranted.	-There are factors that can help differentiate categories of causes. -A systematic approach is crucial. -Expecting staff and physician to explain their conclusions enhances their ability to make better, more specific decisions and reduces the risk of recommending inappropriate or potentially harmful interventions.
TREATMENT/PROBLEM MANAGEMENT		
9. Were specific goals and objectives identified for managing behaviors?	-Before or soon after initiating interventions, staff should identify and document resident-specific goals for managing behaviors. These goals should be relevant to that individual's condition, prognosis, wishes, causes, etc.; for example,	-Appropriate goals for managing problematic behavior depend on understanding the nature and causes of behavior and realistic potential treatments/interventions.

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
	<p>reduce the frequency of aggressive behaviors, stabilize mood, correct underlying causes and consequences of the problematic behavior, reduce undesirable medication side effects, etc.</p> <p>-Education and training that reflects standards of practice and current knowledge base regarding behavior management of the specific population at the facility should be provided.</p>	
<p>10. Were appropriate individuals consulted in planning the management of problematic behavior?</p>	<p>-For non-emergency or non-urgent situations, appropriate individuals such as family, resident, and interdisciplinary, multi-level staff should be included in setting goals and managing problematic behavior.</p> <p>-For urgent or emergency situations, the physician should be included and the appropriate family or other substitute decision maker should be informed of the situation.</p> <p>-A mental health consultant or Community Mental Health staff may be involved. As with integration of specialists/contracted for staff in any area, both the facility and consultant should clearly understand one another's roles, responsibilities and expectations, as well as the resident's needs.</p> <p>-If the staff and the physician have identified a relevant intervention, which the resident or a substitute decision maker refuses, staff should document the refusal, including evidence that the resident or substitute decision-maker was informed of the potential consequences associated with not rendering that treatment. If another valid alternative is available, staff should use it or identify why it is not feasible or appropriate for that resident. Staff, in conjunction with the physician, should document when they believe that refusal of a relevant alternative prevents them from managing a resident's target behavior</p>	<p>-Long-term management of chronic behaviors is different from the acute management of high-risk behaviors due to delirium, psychosis, or other urgent situations.</p> <p>-Use of a specialist with expertise regarding the population may provide helpful options for planning and/or achieving treatment goals, monitoring the resident's progress, and educating/training staff. Often, problematic behavior can be managed effectively by properly identifying causes and then using non-pharmacologic interventions.</p> <p>-A resident/substitute decision maker has the right to consent to, as well as to refuse, treatment. Informed consent requires education about the benefits and risks associated with the treatment, and consequently, the risks and consequences of not providing said treatment.</p> <p>-The Alternative Treatment Order is included in the Mental Health Code. Upon petitioning the Court, it allows for treatment to take place in a community setting and would prevent the resident from refusing treatment during the time of court commitment.</p> <p>-In the event that the treatment team believes that refusal of a relevant alternative prevents them from managing a resident's target behavior effectively and there is no other recourse, the facility may be unable to continue to provide care.</p>

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
	<p>effectively. It may be necessary to obtain an Alternative Treatment Order.</p> <p>-In the event that the resident has no substitute decision maker, it may be necessary to obtain an Alternate Treatment Order.</p>	
<p>11. Was cause-specific management used OR an explanation why it was not feasible or not provided?</p>	<p>-Staff should implement a care plan that relates to the identified target behavior(s), identified causes of problematic behavior, and resident-specific goals and needs. As indicated, the plan should include specific non-pharmacologic, behavior management strategies.</p> <p>-When the cause of a problematic behavior is identified or suspected, staff should address the causes or indicate why they could not or should not have done so for that resident (for example, cause not treatable, previous adverse reaction to a medication, terminal condition, etc.).</p>	<p>-It is often possible to target particular treatments to specific causes, based on evidence of what is more or less likely to work.</p> <p>-Not all problematic behaviors require medication.</p> <p>-Cause-specific interventions are likely to be more effective and may pose lower risk than using non-specific psychoactive medications.</p> <p>-Even when causes are unclear, a systematic approach may provide additional important information to the Interdisciplinary Team.</p>
<p>12. Was a rationale documented for the specific choice of interventions?</p>	<p>-Staff should be able to show evidence as to why they chose specific interventions in specific situations, and how interventions are relevant to the needs, problems, strengths, limitations, and goals of the resident.</p>	<p>-Having a pertinent rationale demonstrates that the staff used a systematic, knowledge-based approach to analyze resident information and to create and implement a plan that is most relevant to those needs.</p>
<p>13. Was there some documented explanation, in conjunction with a physician, for the dose, frequency, and duration of medication treatments?</p>	<p>-If management of problematic behavior requires a medication, the physician (or the staff, based on discussion with the physician) should document rationale for the medication. For example, in the presence of hallucination or delusion, there must be an indication that the hallucination was associated with impaired functioning.</p> <p>-When causes of behavior are not readily identifiable or treatable, symptomatic interventions may be indicated. Therapeutic trials should be considered, documenting the target behavior, rationale, anticipated risks and benefits, and results of the trial.</p>	<p>-Because of their risk of causing ADRs, medications prescribed for problematic behaviors should be used for specific indications, at the lowest effective dose, and for the shortest possible period of time.</p>

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
MONITORING		
14. Were the individual's behavior and related causes monitored and treatment adjusted accordingly?	<p>-In conjunction with the physician, staff should monitor periodically the progress of a resident with problematic behavior, using the basic care process steps.</p> <p>-For chronic or intermittent problematic behaviors, staff should discuss the behaviors and treatment plans at least quarterly; or more often as indicated by the resident's response to interventions. For urgent or emergency problematic behavior, staff should monitor at least several times daily until the resident is stable or improving.</p> <p>-Staff should document descriptions of target behaviors (changes or stabilization) over time and use this information to determine whether/how to modify planned interventions.</p> <p>-If an unstable target behavior worsens during the subsequent 48 hours (or other appropriate time frame established by the care team) after initiating treatment, or is not resolving within a week (or other appropriate time frame established by the care team), then staff should review current interventions with the physician and discuss whether/how to modify the interventions. The discussion and resultant decisions should be documented.</p>	<p>-A systematic approach and descriptive documentation helps the staff see more clearly the outcomes of treatment, to measure the results more objectively, and determine if modifications are necessary or appropriate.</p> <p>-Underlying causes of problematic behavior may resolve, or the resident's condition may change over time. Periodic monitoring is part of a systematic approach to care.</p> <p>-Lack of anticipated response to treatment requires reevaluation of approaches.</p>
15. Were the risks for significant complications and problems related to interventions identified and addressed?	<p>-Staff should monitor all residents for the effects of nonpharmacological interventions.</p> <p>-When planning and implementing care, staff should understand how to adapt or adjust the environment to prevent problematic behaviors.</p>	<p>-Interventions, or lack of them, may precipitate problematic behaviors if they fail to adequately meet the resident's needs or are inappropriate to the condition or background of the resident.</p>
16. Were possible significant adverse drug reactions (ADRs) or other complications of psychoactive medications considered?	<p>-Staff should review each resident's medication regimen for medications that may be associated with increased risk of altered mental states or level of consciousness and other side effects such</p>	<p>-Medications sometimes may exacerbate instead of improve problematic behavior or may adversely affect level of consciousness or function, especially in combination with other medications in various</p>

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
	<p>as tardive dyskinesia, postural hypotension, akathisia, and parkinsonism.</p> <p>-When a possible ADR is identified, staff should notify the physician who should address the possible complications.</p> <p>-If there is no change in medication in the presence of a possible ADR, the staff that communicated with the physician, or the physician, should document rationale for not tapering or discontinuing the medication.</p> <p>-The consultant pharmacist should participate in the evaluation on an ongoing basis and should help staff recognize medications that may be associated with changes in mental status or behavior.</p>	<p>categories that are known to affect the central nervous system (CNS).</p> <p>-More psychoactive medications should not be added to a regimen without considering possible problems caused by the existing ones.</p>

Appendix: Approach to Medication Management of Problematic Behaviors Flow Chart

The following flow chart presents a systematic approach to managing problematic behavior where medication treatments may be involved. It is suggested as a companion to the Behavior Management and Antipsychotic Medication Prescribing Clinical Process Guidance Document.

Ordinarily, medications should be used to treat individuals with problematic behavior only after considering other plausible causes for those behaviors and only if they have conditions (primarily psychosis and mental illness) that are likely to respond to medications.

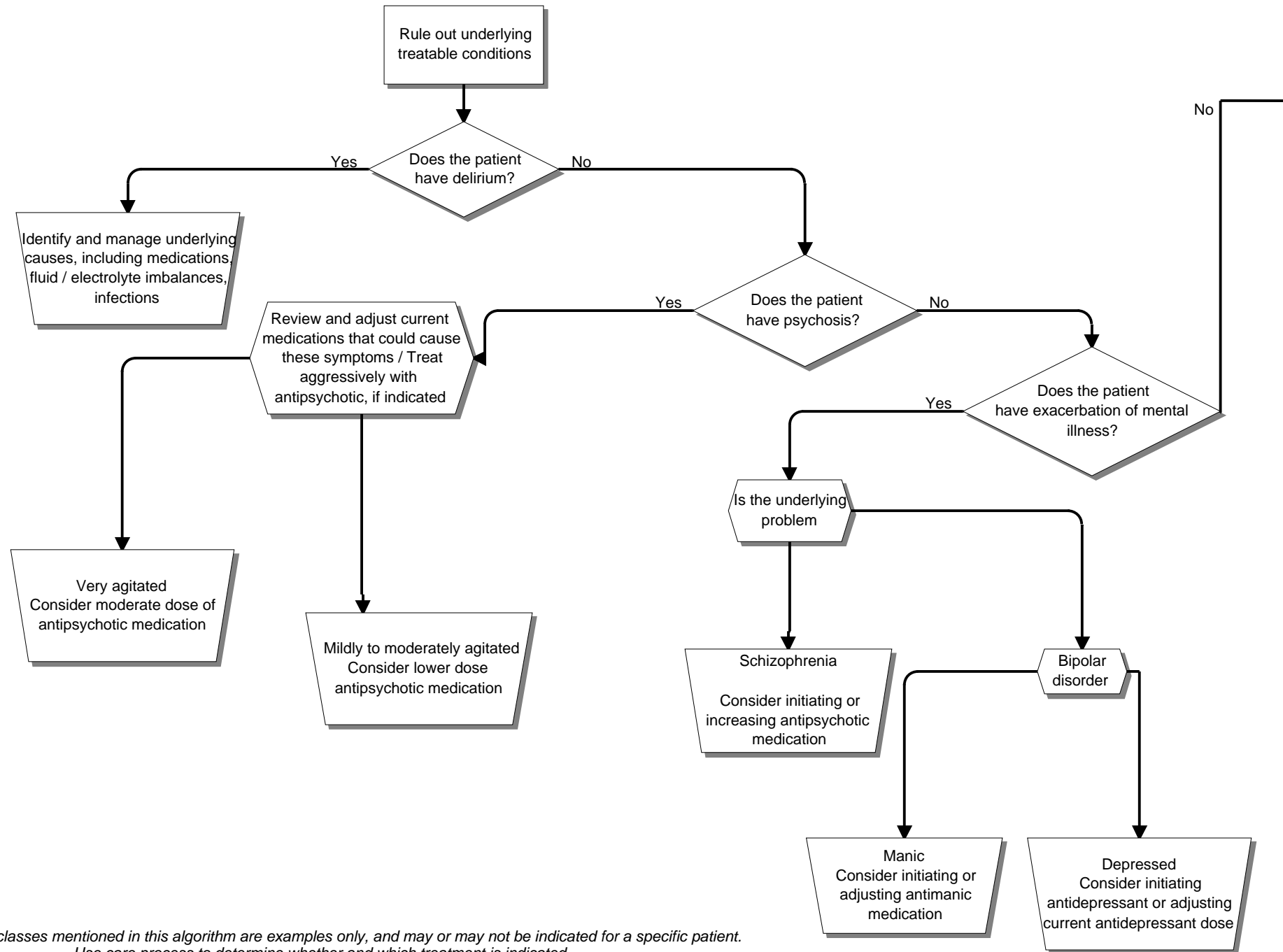
Please note: The flow chart was revised 11/03. Drug classes listed in the attached flow chart are intended to be referred to as examples only. They may or may not be indicated for a specific resident. Treatment selection for any resident should be based on considering their coexisting illnesses, specific risk factors, and other current medications, among other things. Use care process to determine whether and which treatment is indicated.

None of the medications or treatments listed in the following flow chart should be considered to be official recommendations.

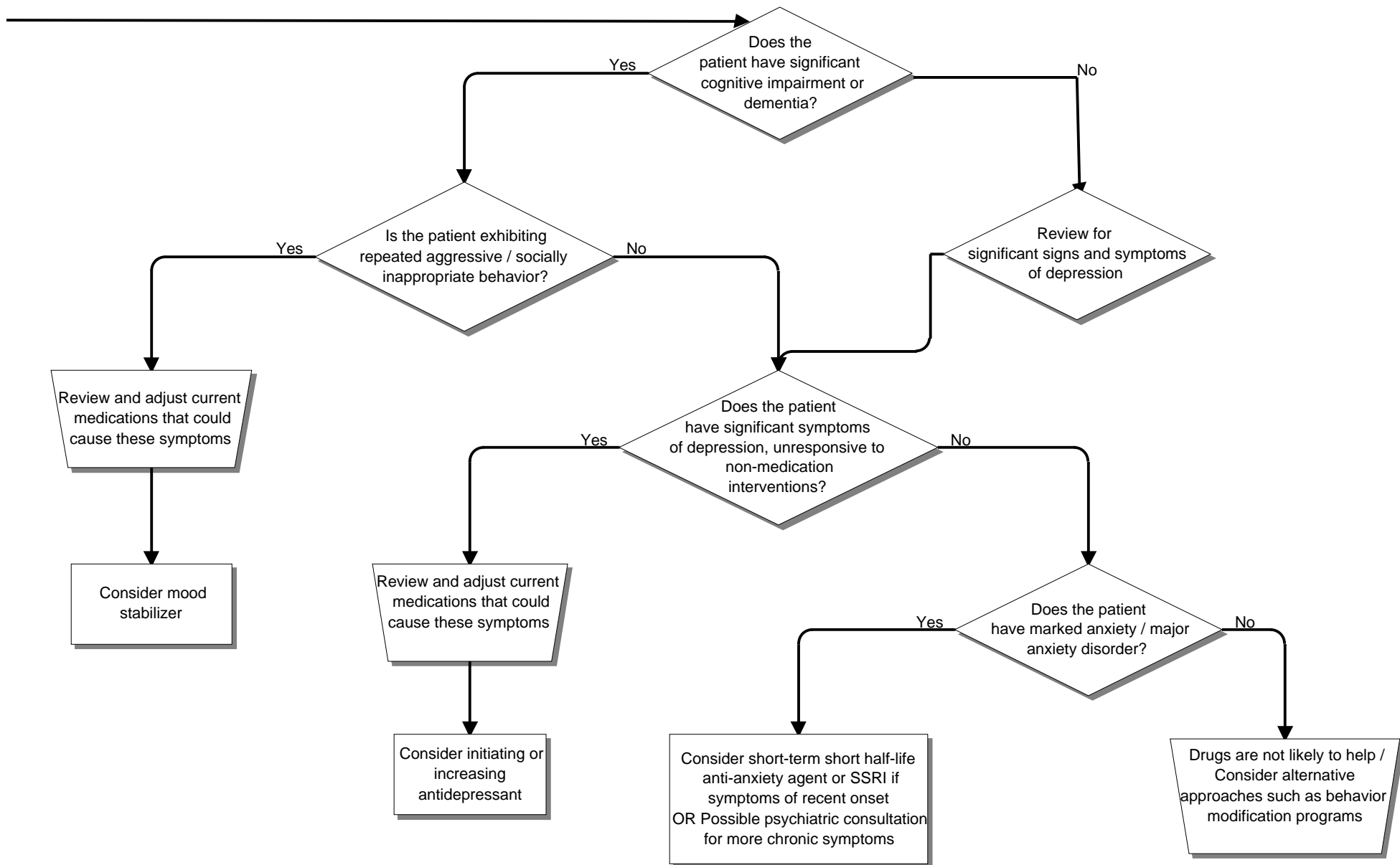
Appendix: Behavior/Mood Symptom Tracking Tool

The Behavior/Mood Symptom Tracking Tool included in this appendix is provided as an example of a type of behavior tracking document. This two sided-form was developed at Iosco County Medical Care Facility and is based on MDS data. The accompanying Mood and Behavior Tracking Symptoms Sheet lists consistent vocabulary utilized by staff at the facility.

Approach to Medication Management of Problematic Behaviors



NOTE: Drug classes mentioned in this algorithm are examples only, and may or may not be indicated for a specific patient. Use care process to determine whether and which treatment is indicated.



DATE PLAN INITIATED

[illegible]

Resident Name _____ **Medical Record #** _____

MONTHLY BEHAVIOR SUMMARY BROKEN INTO SHIFTS

SHIFT	BEHAV1	BEHAV2	BEHAV3	BEHAV4	BEHAV5	BEHAV6	BEHAV7	BEHAV8
1ST								
2ND								
3RD								
TOTAL								

NARRATIVE MONTHLY BEHAVIOR SUMMARY

MOOD AND BEHAVIOR TRACKING SYMPTOMS

THE FOLLOWING ARE A LIST OF MOOD/BEHAVIOR SYMPTOMS TO BE UTILIZED ON THE FACILITY BEHAVIOR/MOOD SYMPTOM TRACKING TOOL. PLEASE DO NOT ADD ANY OTHER SYMPTOMS ON TRACKING LOGS PRIOR TO DISCUSSING WITH BEHAVIOR MANAGEMENT TEAM.

WANDERING BEHAVIORAL SYMPTOMS:

**RESTLESSNESS
PACING TO THE POINT OF EXHAUSTION
WANDERING INTO INAPPROPRIATE PLACES
ATTEMPTING TO LEAVE FACILITY
LOUD POUNDING ON DOORS**

VERBALLY ABUSIVE BEHAVIOR SYMPTOMS:

**SCREAMING
VERBALLY THREATENING
SWEARING**

PHYSICALLY ABUSIVE BEHAVIORAL SYMPTOMS:

**HITTING
KICKING
BITING
SCRATCHING/PINCHING**

SOCIALLY INAPPROPRIATE/DISRUPTIVE BEHAVIORAL SYMPTOMS:

**DISRUPTIVE SOUNDS
NOISINESS/SCREAMING
SELF ABUSIVE ACTS
UNDESIRED SEXUAL BEHAVIOR
DISROBING IN PUBLIC
SMEARED/THREW FOOD/FECES
HOARDING
RUMMAGED THROUGH OTHER'S BELONGINGS**

RESISTS CARE:

**RESISTS ADL CARE
REFUSES TO EAT
RESISTED TAKING MEDICATIONS**

PARANOID BEHAVIOR SYMPTOMS:

**SUSPICIOUSNESS/FEARFULNESS
HALLUCINATIONS (SPECIFY)
DELUSIONS (SPECIFY)
DISORGANIZED THINKING**

MOOD BEHAVIOR SYMPTOMS:

**CRYING/TEARFULNESS
PERSISTENT ANGER TOWARD SELF OR OTHERS
SOCIAL WITHDRAWAL**

With permission from Iosco Medical Care Facility

Appendix

Conditions/circumstances that may result in a change in mental status or behavior

Physical

Medications
Infection
Pain
Trauma
Dehydration
Urinary retention
Fecal impaction
Fluid/electrolyte disturbance
Metabolic disturbance
Hypo/hyperglycemia
Hyper/hypothyroidism
Seizure
Stroke
Cardiac disturbance
Cancer
Weight loss
Surgery/Anesthesia
Anemia
Decreased oxygenization
Alcohol/drug abuse
Mental illness

Situational

Loss
Admission/transfer
Hospitalization
Change
Physical environment
Interactions with others
Communication problems
Care structure/routines
Activity
Unmet needs
Anxiety/Fear

Medications that may affect mental status

Cardiac meds	Antihypertensive
Antidepressant	Psychoactive
Anticonvulsant	Antiemetic
Antihistamine	Decongestant
Sedative/sleep medication	Narcotic
Muscle relaxant	NSAID
Steroid	Immunosuppressant
Antineoplastic	Radiocontrast dye
H2 Blocker	Anticholinergic
Anti-Parkinson	Anti-diabetic
Antibiotic	

RAPS with possible significance to changes in mental status/behavior

Delirium	Cognitive Loss/Dementia	Visual Function
Communication	ADL Functional/Rehabilitation	Urinary Incontinence
Mood State	Psychosocial Well-Being	Behavioral Symptoms
Activities	Dehydration/Fluid Maintenance	Nutritional Status
Falls	Dental Care	Pressure Ulcers
Psychotropic Drug Use		Physical Restraints

In developing this Clinical Process Guideline and the accompanying Guidance Document, the Clinical Advisory Panel reviewed scientific literature and other available reference materials. While we regret that some of the tables and scales cannot be included with this document due to copyright laws, and others were too lengthy to copy, facilities or interested parties can and are encouraged to obtain the source materials.

References

American Medical Directors Association. Altered Mental States Clinical Practice Guideline. 1998. *Includes relevant information related to assessing and managing residents with altered mental states in long term care settings. 1-800-876-AMDA or amda.com*

American Medical Directors Association. Dementia Clinical Practice Guideline. 1998. *Includes relevant information related to assessing and managing residents with dementia in the long term care setting. 1-800-876-AMDA or amda.com*

Centers for Medicare and Medicaid Services. Long-Term Care Resident Assessment Instrument User's Manual Version 2.0 Revised. 2002. *Guide to the use of the Resident Assessment Instrument, which consists of the Minimum Data Set, Resident Assessment Protocols, and Utilization Guidelines. Available at cms.hhs.gov*

Centers for Medicare and Medicaid Services. State Operations Manual. *Identifies federal regulatory requirements for long-term care facilities. Available at cms.hhs.gov*

Conn D, Hermann N, Kaye A, Rewilak D, Schogt B., Eds. Practical Psychiatry in the Long-Term Care Facility A Handbook for Staff Second Revised and Expanded Edition. Hogrefe & Huber Publishers. 2001.

Eastern Michigan University Huron Woods Alzheimer's Research Program. Dementia Care Series: Caring Sheets: Thoughts and Suggestions for Caring. Michigan Department of Community Health. *Covering a broad range of topics related to dementia care available by contacting Lorraine Sigle, Mental Health and Aging Project Lansing Community College PO Box 40010 Lansing, MI 48901 Phone: 517-483-1529.*

Robinson A, Spencer B, White L. Understanding Difficult Behaviors. Eastern Michigan University. Ypsilanti, Michigan 1999. *Practical suggestions for coping with Alzheimer's Disease and related illnesses. Available at Eastern Michigan University Alzheimer's Education Program PO Box 981337 Ypsilanti, Michigan 48198-1337. Phone 734-487-2335 Fax: 734-487-0298 or www.emu/public/alzheimers.*